

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An apparatus for receiving multiple spread spectrum signals each traveling upon a different propagation path and each having a resultant arrival time difference with respect to one another, comprising:

a first demodulator for demodulating a first spread spectrum signal of said multiple spread spectrum signals in accordance with a first arrival time; and

a second demodulator for demodulating a second spread spectrum signal of said multiple spread spectrum signals in accordance with a time interval difference with respect to said first arrival time,

wherein said first demodulator comprises:

a pseudorandom noise descrambler for descrambling said first spread spectrum signal in accordance with a pseudorandom noise sequence;

a phase adjustor for extracting a pilot signal from said descrambled first spread spectrum signal and multiplying said descrambled first spread spectrum signal with said extracted pilot signal, thereby forming a phase adjusted signal; and

a dechannelization unit for multiplying said phase adjusted signal by an orthogonal channel sequence.

2. (Cancelled)

3. (Currently Amended) The apparatus of Claim 1 further comprising a Walsh sequence generator for generating said orthogonal channel sequence; and ~~wherein said dechannelization unit comprises:~~

a delay element for receiving said orthogonal channel sequence and for delaying said orthogonal channel sequence ~~by said time interval~~ to provide a delayed orthogonal channel sequence to said second demodulator.

4. (Currently Amended) The apparatus of Claim 1 wherein said phase ~~adjustment~~ adjustor comprises:

a pilot filter for extracting said pilot signal from said descrambled first spread spectrum signal; and

complex conjugate multiplier for receiving said first spread spectrum signal and said extracted pilot signal and for multiplying said descrambled first spread spectrum signal with said extracted pilot signal.

5. (Previously Presented) The apparatus of Claim 4 wherein said pilot filter extracts said pilot signal in accordance with an orthogonal pilot sequence.

6. (Previously Presented) The apparatus of Claim 1 further comprising a combiner for receiving said first demodulated spread spectrum signal and said second demodulated spread spectrum signal and for combining a delayed first demodulated spread spectrum signal and said second demodulated spread spectrum signal to provide an improved estimate of a spread spectrum signal.

7. (Previously Presented) The apparatus of Claim 1 further comprising a switch for providing said first spread spectrum signal to said first demodulator and for switching after said ~~fixed~~ time interval to provide said second spread spectrum signal to said second demodulator.

8. (Currently Amended) A method for receiving multiple spread spectrum signals each traveling upon a different propagation path and each having a resultant arrival time difference with respect to one another, said method comprising the steps of:

demodulating a first spread spectrum signal of said multiple spread spectrum signals in accordance with a first arrival time; and

demodulating a second spread spectrum signal of said multiple spread spectrum signals in accordance with a time interval difference with respect to said first arrival time,

wherein said step of demodulating said first spread spectrum signal comprises the steps of:

descrambling said first spread spectrum signal in accordance with a pseudorandom noise sequence;

extracting a pilot signal from said descrambled first spread spectrum signal;
multiplying said descrambled first spread spectrum signal with said extracted pilot signal,
thereby forming a phase adjusted signal; and
multiplying said phase adjusted signal by an orthogonal channel sequence.

9. (Cancelled)

10. (Currently Amended) The method of Claim 8 further comprising the steps of:
generating said orthogonal channel sequence by a Walsh sequence generator; and
delaying said orthogonal channel sequence by ~~said time interval~~ a delay element to
provide a delayed orthogonal channel sequence.

11. (Previously Presented) The method of Claim 8 further comprising the step of combining
a delayed first demodulated spread spectrum signal and said second demodulated spread
spectrum signal to provide an improved estimate of a spread spectrum signal.

12. (Currently Amended) The method of Claim 8 further comprising the steps of:
first switching to provide said first spread spectrum signal; and
second switching after said ~~fixed~~ time interval to provide said second spread spectrum
signal.

13. (Currently Amended) An apparatus for receiving multiple spread spectrum signals each
traveling upon a different propagation path and each having a resultant arrival time difference
with respect to one another, said apparatus comprising:

means for demodulating a first spread spectrum signal of said multiple spread spectrum
signals in accordance with a first arrival time; and

means for demodulating a second spread spectrum signal of said multiple spread
spectrum signals in accordance with a time interval difference with respect to said first arrival
time,

wherein said means for demodulating said first spread spectrum signal comprises:

means for descrambling said first spread spectrum signal in accordance with a pseudorandom noise sequence;

means for extracting a pilot signal from said descrambled first spread spectrum signal;

means for multiplying said descrambled first spread spectrum signal with said extracted pilot signal, thereby forming a phase adjusted signal; and

means for multiplying said phase adjusted signal by an orthogonal channel sequence.

14-20. (Cancelled)

21. (Currently Amended) The apparatus of Claim 13 further comprising:

means for generating said orthogonal channel sequence; and

means for delaying ~~said~~ a delayed orthogonal channel sequence ~~by said fixed time interval~~ to provide said orthogonal channel sequence.

22. (Currently Amended) The apparatus of Claim 13 further comprising means for combining ~~said~~ a delayed first demodulated spread spectrum signal and said second demodulated spread spectrum signal to provide an improved estimate of a spread spectrum signal.

23. (Previously Presented) The apparatus of Claim 13 further comprising:

means for first switching to provide said first spread spectrum signal; and

means for second switching after said fixed time interval to provide said second spread spectrum signal.

24-27. (Cancelled)